

## MEDICAL MONITORING AND CHEMICAL EXPOSURE

### Policy Statement

Each employee who, through his assigned job responsibilities, may be exposed to potentially hazardous chemicals will be provided training to prevent or minimize their potential exposure. Each such employee will also be provided baseline medical monitoring for access by the Division Environmental Toxicologist for evaluation and interpretation, and appropriate medical personnel if needed, to respond to an exposure to hazardous chemicals. It shall be the supervisor's responsibility to ensure that appropriate training, clothing and equipment assignment/fitting, and medical monitoring are completed prior to the individual's assignment to job responsibilities that may expose him to potentially hazardous chemicals.

The medical monitoring and chemical exposure control program provides ISDA personnel with sufficient information and training to perform duties involving potential exposure to chemicals. Each individual will be prepared to prevent exposure, minimize the extent of exposure, and recover from exposure. Data provided through the baseline medical examinations shall be placed in a secured file for access if an individual is exposed to a potentially hazardous chemicals. The Environmental Toxicologist for the Division of Agricultural Resources shall be responsible for ensuring that medical records and other appropriate information or interpretation is available in the medical records in order to respond to such an event.

Contracts with service providers have been developed to conduct annual medical evaluations for employees who may be exposed to potentially hazardous materials. The results will be stored by the service provider for a period of 30 years. Each Division will be responsible for managing the medical program for its employees to ensure timely evaluations and to note medical limitations for an employee. Current service providers include: Occupation Medicine Associates, Boise; Dr. Tony Golden, Pocatello; and, Deaconess Medical Center, Spokane, Washington.

**002. TITLE AND SCOPE.** These standards shall be cited as the Idaho General Safety and Health Standards (IGSHS), and shall be applicable to places of public employment, as defined in Sections 72-205 and 72-207, Idaho Code, by the State of Idaho and its political subdivisions i.e. counties, cities, public school districts, and other taxing entities as follows: (7-1-97)

### **Medical Monitoring**

Medical monitoring is a service provided by the Department to specific staff members. The monitoring program will include the following:

### **Baseline Monitoring**

Initial/baseline medical examinations will be conducted to provide information on an employee's medical fitness and ability to perform the assigned duties. In addition, the baseline examination is important in establishing conditions of health prior to potential occupational exposures.

### **Periodic Monitoring**

Employees of the State of Idaho Department of Agriculture will participate in the State of Idaho's Worker Health and Safety Medical Surveillance Program and shall undergo periodic health monitoring as set forth in said program. .

### **Site Specific Monitoring**

Wearing chemical protective clothing can cause heat stress, accident proneness, and fatigue. The major problem is heat stress caused by protective clothing interfering with the body's ability to cool itself. Clothing that provides a barrier against chemicals contacting the skin also prevents the efficient dissipation of body heat. Evaporation, the body's primary cooling mechanism is reduced, since ambient air is not in contact with the skin's surface. Other heat exchange mechanisms (convection and radiation) are also impeded. Additional strain is put on the body as it attempts to maintain its heat balance. This added stress could result in health effects ranging from transient heat fatigue to serious illness or death.

Monitoring of personnel wearing protective equipment will commence when the ambient temperature is 80 degrees Fahrenheit or above. Frequency of monitoring will increase as the ambient temperature increases or if slow recovery rates are indicated. When temperatures exceed 80 degrees Fahrenheit workers will be monitored for heat stress after every work period.

Heart rate (HR) will be measured by counting the pulse for 30 seconds as early as possible in the resting period. The HR at the beginning of the resting period should not exceed 110 beats per minute. If the HR is higher, the next work period shall be shortened by 33%, while the length of the rest period will remain the same.

Body temperature will be measured orally with a clinical thermometer as early as possible in the rest period. Oral temperature (OT) at the

beginning of the rest period should not exceed 99 degrees Fahrenheit. If it does, the next work period will be shortened by 33%, while the length of the rest period will remain the same.

Accident proneness also increases when wearing protective clothing. Suits are cumbersome, decrease mobility and dexterity, lessen visual and audio acuity and increase physical exertion. This increases the risk of common accidental injury, for example, slips, falls, or being struck. Suited activity shall be limited to operational tarp and decontamination area.

Additional site specific medical monitoring shall be conducted as necessary at the discretion of the site or project specific Health and Safety Officer (HSO). In the case that chemical exposure at or above the PEL or Permissible Exposure Limit.

### **Exposure/Injury Medical Support.**

An Environmental Toxicologist shall be available (in person or via telephone) for reference and recommendations to the HSO regarding any chemical exposures and/or injuries that may be encountered at the collection site.

### **Exit Medical Monitoring**

When an individual leaves a position involving potential exposure to a hazardous or chemical contamination they will be expected to participate in an Exit Medical Examination.

### **Post Exposure Medical Examination**

Employee will be sent in for an examination after any known exposure.

### **Site Control Measures**

Site control measures will include the completion of appropriate training and planning prior to any site activity. When a site evaluation is warranted, the Site Evaluation Plan will include the following.

The following section defines measures and procedures for maintaining site control. Site control is an essential component in the implementation of the site health and safety program.

### **Buddy System**

Personnel on site must use the buddy system when wearing respiratory protection. As a minimum, two other persons, suitably equipped, are required as safety backup during collection operations.

Visual contact must be maintained between pairs on site on safety personnel. Unloading and initial staging personnel should remain close together to assist each other in their workload.

### **Hazard Communication Written Program**

A Hazard Communication Written Program in compliance with the Hazard Communication Standard. This written plan lists the chemicals that will be collected at the site, indicates who is to be responsible for the various aspects of the collections activities, and indicates where written materials will be made available to employees at the site.

### **Respirator Usage and Fit Testing**

The following personal protective equipment may be supplied to each field inspector as required by assignment.

- ◆ Full Face Respirator with a variety of replacement cartridges.
- ◆ Positive Pressure head gear with suitable air pump and replacement cartridges.
- ◆ Self contained breathing devices.

Each employee assigned specific equipment is expected to maintain the units in appropriate working conditions and to complete all routine calibrations and fit testing that might be recommended. The recommendations are generally applicable to a specific assignment and the type of equipment.

The Idaho State Department of Agriculture will arrange for appropriate training, maintenance and calibration or test fitting assessments.